

Arizona Department of Health Services

Pandemic Influenza Response Plan



August 2005

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PRIMARY AGENCIES

State: Arizona Department of Health Services (ADHS)
Federal: Centers for Disease Control and Prevention (CDC)
International: World Health Organization (WHO)

SUPPORT AGENCIES

State: Arizona Division of Emergency Management (ADEM)
Office of Attorney General
Governor's Office
State Board of Funeral Directors and Embalmers
Department of Agriculture

County: Health Departments
County Hospitals
Emergency Management Departments
Medical Examiners

Local: Metropolitan Medical Response Systems
Incorporated Community Governments
City Emergency Managers

Federal: Federal Emergency Management Agency (FEMA)
U.S. Public Health Service (USPHS)
Office of Emergency Preparedness (OEP)
Centers for Disease Control and Prevention (CDC)
Veterans Administration (VA) Medical Centers
U.S. Department of Agriculture (USDA)

Private: Local Medical Facilities
Arizona Chapter of the American Academy of Pediatrics
Arizona Healthcare and Hospital Association
Arizona Funeral Directors Association
Arizona Chapter of American College of Emergency Physicians
Arizona Medical Association
Arizona Infectious Disease Society
Arizona Osteopathic Medical Association
Arizona Chapter of the Emergency Department Nurses Association
Arizona Nurses Association
Association of Practitioners of Infection Control

Volunteer: American Red Cross
Critical Incident Stress Debriefing – Arizona Chapter

Arizona Voluntary Organizations Active in Disasters (AzVOAD)
Salvation Army
University of Arizona medical/nursing/pharmacist/public health students

LIST OF ACRONYMS

AAC – Arizona Administrative Code
ADEM – Arizona Division of Emergency Management
ADES – Arizona Department of Economic Security
ADHS – Arizona Department of Health Services
AH1, AH3, AH5, AH7 – Types of Influenza Virus (H=Hemagglutinin)
AIPO – Arizona Immunization Program Office
AOMA – Arizona Osteopathic Medical Association
ARMA – Arizona Medical Association
ARS – Arizona Revised Statutes
AzVOAD – Arizona Voluntary Organizations Active in Disasters
BEPR – Bureau of Emergency Preparedness and Response
CDC – Centers for Disease Control and Prevention
CEOC – County Emergency Operations Center
CHC – Community Health Center
DHHS – Department of Health and Human Services
EDC - Epidemiology and Disease Control
ELR – Electronic Lab Reporting
FEMA – Federal Emergency Management Agency
FDA – Food and Drug Administration
HAN – Health Alert Network
IDES- Infectious Disease Epidemiology Section
HEOC – Health Emergency Operations Center
ILI – Influenza Like Illness
ITS – Information Technology Services
JENC – Joint Emergency News Center
JIC – Joint Information Center
LHD – Local Health Department
LIMS – Laboratory Information Management System
LITS – Laboratory Information Tracking System
MEDSIS – Medical Electronic Disease Surveillance Intelligence System
MMRS – Metropolitan Medical Response System
NVPO – National Vaccine Program Office
OEP – Office of Emergency Preparedness
OIDS – Office of Infectious Disease Services
PCR – Polymerase Chain Reaction
PHIMS – Public Health Incident Management System
PIO- Public Information Officer
PPE – Personal Protective Equipment
Q & A – Question And Answer(s)
SARS – Severe Acute Respiratory Syndrome
SEOC – State Emergency Operations Center
SERRP – State Emergency Response and Recovery Plan

SIREN – Secure Integrated Response Electronic Notification
SNS – Strategic National Stockpile
UA – University of Arizona
USDA – United States Department of Agriculture
USPS – United States Public Health Service
VA – Veterans Administration
VACMAN – Vaccine Management System
VAERS – Vaccine Adverse Event Reporting System
VFC – Vaccines For Children Program
WHO – World Health Organization

1.0 EXECUTIVE SUMMARY

A pandemic influenza is inevitable. To lessen the impact of an influenza pandemic, the Arizona Department of Health Services (ADHS) has created this Pandemic Influenza Response Plan to promote an effective and coordinated response throughout the pandemic. The plan has been developed through the joint efforts of the Infectious Disease Epidemiology Section (IDES), the Arizona Immunization Program Office (AIPO), the Bureau of Emergency Preparedness and Response (BEPR), and the Public Information Office (PIO). It is an annex to the ADHS Emergency Response Plan. Response activities will be carried out in collaboration with the Arizona Division of Emergency Management (ADEM), the Arizona Office of Homeland Security, local health departments and other federal, state, local, and volunteer agencies and organizations.

The Centers for Disease Control and Prevention (CDC) <http://www.dhhs.gov/nvpo/pandemics/flu2.htm#5> and the World Health Organization (WHO) http://www.who.int/csr/disease/avian_influenza/Annexes.pdf have divided pandemic planning into six phases:

- **Inter-pandemic:** This phase includes the inter-pandemic period, identification of a novel virus in humans (novel virus alert), and confirmation of person-to-person transmission in the general population (pandemic alert).
- **Pandemic imminent:** The novel virus spreads to multiple countries and disease patterns indicate that serious morbidity and mortality is likely.
- **Pandemic:** The novel virus causes unusually high rates of morbidity and/or mortality in multiple, widespread geographic areas and formal declaration of a pandemic is made.
- **End of the first wave:** Morbidity declines.
- **Pandemic second wave:** The same novel virus strain is responsible for a later wave of morbidity.
- **Pandemic over:** The end of the pandemic is declared.

The Arizona plan identifies responsible parties and prescribes necessary activities according to each of the pandemic phases. Four components are included in each phase:

- Disease and Viral Surveillance
- Vaccine and Pharmaceutical Delivery
- Emergency Response
- Communications

During a pandemic, vaccines and antivirals will be in short supply and will have to be allocated on a priority basis. CDC will communicate with state and territorial health departments about pandemic stages, vaccine availability, prioritization of vaccine and antivirals/antibiotics, and other recommendations. Since production of an influenza vaccine currently requires months, vaccine may not be available in the beginning of a pandemic.

ADHS' roles and responsibilities will include coordinating disease surveillance with CDC and local health departments, providing virologic surveillance and laboratory assistance, receiving and communicating federal directives, brokering vaccine and medical supplies, assisting hospitals in responding to an influx of patients, and providing information to the local health departments, medical providers and the general public. ADHS will provide support to the local health departments if local resources are exceeded.

Local health departments' roles and responsibilities will include conducting flu surveillance in their jurisdictions; assessing their community's needs; allocating, distributing and administering flu vaccine, if available; and responding to all crises in their counties, such as hospital bed shortages, public inquiries and media requests. During a state of emergency, coordination of messages between federal, state, and local officials will occur through the Joint Information Center at the local level and at the state level through the Joint Emergency News Center at the State Emergency Operations Center (SEOC) <http://www.dem.state.az.us/serrp/esf02.pdf>. ADEM will assist by operating the SEOC and providing other logistical support.

If an influenza pandemic is declared by WHO, see: <http://www.who.int/topics/influenza/en/> ADHS will activate its incident management structure, the Public Health Incident Management System (PHIMS). The PHIMS is compliant with the National Incident Management System. The PHIMS command staff will oversee planning, response, recovery, and mitigation efforts. It is expected that the Governor would declare a state of emergency, during which the Incident Commander of all statewide activities will be the ADHS Director. ADHS, ADEM, and the Arizona Office of Homeland Security will work together to respond to the needs of the pandemic, in conjunction with local health departments, local emergency management, and other partners and stakeholders.

2.0 INTRODUCTION AND BACKGROUND

According to the World Health Organization (WHO), "an influenza pandemic occurs when a new influenza virus appears against which the human population has no immunity, resulting in several simultaneous epidemics worldwide with enormous numbers of deaths and illness." In past pandemics, influenza viruses have spread worldwide within months, and are expected to spread even more quickly given modern travel patterns. There may be as little as one to six months warning before outbreaks begin in the United States. Outbreaks are expected to occur simultaneously, preventing shifts in resources that commonly occur in other natural disasters. Pandemic influenza is considered to be a high-probability event, and some experts consider it to be inevitable.

In Arizona, an influenza pandemic could result in numerous persons ill with influenza. The number of persons hospitalized would exceed the capacity of these institutions. Additionally, the number of deaths due to influenza like illness (ILI) would rise above regular influenza season rates. The Arizona Department of Health Services has written this Pandemic Influenza Response Plan to promote an effective and coordinated response, from the first novel virus alert through the conclusion of the last wave of the pandemic.

To prepare for the next pandemic, public health officials from around the world have initiated the planning process. The development of Arizona's plan was based on the Centers for Disease Control and Prevention (CDC) guidance, *Pandemic Influenza: Planning Guide for State and Local Officials, Version 2.1, January 1999*, the U.S. Department of Health and Human Services' *Pandemic Influenza Response and Preparedness Plan, August, 2004* <http://www.hhs.gov/nvpo/pandemicplan/> and the *Pandemic Influenza Incident Annex of the State Emergency Response and Recovery Plan (SERRP)*. The plan was developed through the joint efforts of the Infectious Disease Epidemiology Section (IDES), the Arizona Immunization Program Office (AIPO), the Bureau of Emergency Preparedness and Response (BEPR), and the Public Information Office (PIO).

2.1 ORGANIZATION OF THE PLAN

This plan is an Annex to the Arizona Department of Health Services Emergency Response Plan. The response activities will be carried out in collaboration with the Arizona Division of Emergency Management and local health departments and other agencies and organizations

National pandemic planning is divided into six phases, from early identification of a novel virus to resolution of the pandemic. These phases are defined by CDC in collaboration with WHO, and are:

- **0 Inter-pandemic (includes Pre-Pandemic, Novel Virus Alert, Pandemic Alert levels)**
- **1 Pandemic imminent**
- **2 Pandemic**
- **3 End of the first wave**
- **4 Pandemic second wave**
- **5 Pandemic over**

See Appendix A and the Tiered Response Levels section for definitions of these phases.

The Arizona plan follows the same phase guidelines, prescribing necessary activities and identifying responsible parties by pandemic phase. Four essential components of a pandemic response are defined in the CDC's Influenza Pandemic Guidance Document <http://www.dhhs.gov/nvpo/pandemicplan/> and include:

- **Disease and Viral Surveillance**
- **Vaccine and Pharmaceutical Delivery**
- **Emergency Response**
- **Communications**

Each pandemic phase in the Tiered Response section includes essential activities to be accomplished in each of these four component areas.

3.0 SITUATION AND ASSUMPTIONS

The development of Arizona's Pandemic Influenza Response Plan is based on the following assumptions:

- An influenza pandemic is inevitable.
- A novel influenza virus strain will likely emerge in a country other than the United States, but a novel strain could emerge first in the United States.
- Although there may be isolated pockets, the pandemic could affect all geographic areas of the state.
- With the emergence of a novel strain, it is likely that all persons will need two doses of vaccine to achieve optimal antibody response. However, when the pandemic occurs, vaccines and medicines will be in short supply and will have to be allocated on a priority basis.
- The federal government has assumed responsibility for devising a liability program for vaccine manufacturers and persons administering the vaccine
- According to Centers for Disease Control and Prevention (CDC) guidelines, total vaccine supply will be under the control of the federal government, with states receiving an allotment.
- Arizona's temporary residents, winter visitors, migrant workers and tourists will create a potential vaccination target population of nearly double that of the permanent resident population.
- The emergency response element will require the substantial interaction of agencies beyond health departments.
- Response to the demand for services will require non-standard approaches, including:
 - Discharge of all but critically ill hospital patients.
 - Expansion of hospital capacity by using all available space and equipment on the hospital campus,
 - Adjust patient-to-hospital staff ratio;
 - Recruitment of volunteers who can provide custodial services under the general supervision of health and medical workers;
 - Relaxation of practitioner licensure requirements as deemed appropriate; and
 - Utilization of general purpose and special needs shelters as temporary health facilities.
 - Expansion of mortuary services capacity
- The federal government has assumed responsibility for developing "generic" guidelines and information templates, including fact sheets, triage and treatment of influenza patient protocols, and guidelines for the distribution and use of antiviral agents, that can be modified at the state and local level. Until these are developed and available, the state has the responsibility to develop such guidelines for its citizens.
- Secondary bacterial infections following influenza illness may stress antibiotic supplies.

4.0. CONCEPT OF OPERATIONS

The Pandemic Flu response strategy involves the following elements:

- Federal guidance and direction
- Statewide Emergency Response
- Local support
- Surveillance and Data Management
- Vaccine and Antiviral Procurement
- Prevention Education Efforts and Media Outreach
- Hospital / Health Care Coordination
- State Laboratory
- Special Populations, such as Long-term Care and Other Partner Support
- Executive Planning Committee

4.1 FEDERAL GUIDANCE AND DIRECTION

As the pandemic develops, the World Health Organization (WHO) will notify the Centers for Disease Control and Prevention (CDC) and other national health agencies of the progress of the pandemic. CDC will communicate with ADHS and other state and territorial health departments about pandemic stages, vaccine availability, recommendations for prioritizing vaccine and antivirals/antibiotics, information about the virus (laboratory findings), national response coordination, and other recommended strategies for pandemic detection, control and response. ADHS is the main conduit for communications with the CDC for all statewide parties.

4.2 STATEWIDE EMERGENCY RESPONSE

There is integration between local and state emergency management structure. The prime response is at the local level with support from ADHS as needed. The local health departments are responsible for assessing their communities' needs, allocating vaccine and responding to public/media inquiry and other situations that arise.

If the Governor declares a State of Emergency, the State's emergency management structure is put into place (refer to the State Emergency Response and Recovery Plan (SERRP)) <http://www.dem.state.az.us/serrp/serrp.htm>. The Incident Commander of all statewide activities is the ADHS Director. ADEM will operate the State Emergency Operations Center (SEOC) and provide other logistical support. ADHS and ADEM will work together to respond to the needs of the pandemic, in conjunction with local health departments, local emergency management, and other partners and stakeholders. The responsibilities of agencies will increase with each successive stage of the pandemic

The ADHS incident management structure used in the Department is the "Public Health Incident Management System," or PHIMS, as described in the ADHS Public Health Emergency Response Plan. Please refer to Appendix B – PHIMS Description. This structure is in place but inactivated during normal day-to-day operations. In the event of an emergency or when activities become

overwhelming, the Director, who acts as the Incident Commander, will assign an Incident Manager within Public Health Services to coordinate the Department's activities and report to the command staff. The command staff and the Incident Manager work together to keep the Incident Commander (Director) well informed. It is also essential to coordinate with the local health departments and other agencies.

The PHIMS command staff will devise the overall structure and responsibilities of "command and control" operations. The command staff will oversee planning, response, recovery, and mitigation efforts.

4.3 LOCAL SUPPORT

Local health departments (LHDs) http://www.azdhs.gov/phs/local_health/health_depts.htm will carry out the components of the pandemic flu response in their communities. Each county is expected to have its own pandemic flu plan that is consistent with the Department's plan. Examples of local health departments' activities include: conducting flu surveillance in their jurisdictions; allocating, distributing and administering flu vaccine, if available; and responding to all crises in their counties, such as healthcare facility surge capacity, public inquiry and media requests, etc.

ADHS will provide support to the local health departments if their resources are exceeded. Additionally, ADHS will provide regular updates on pandemic status and response activities to the local health departments, through conference calls, Secure Integrated Response Electronic Notification (SIREN) <https://login.siren.az.gov/sso/> postings, health alerts and other avenues.

4.4 SURVEILLANCE AND DATA MANAGEMENT

The ADHS will coordinate surveillance statewide as part of PHIMS, primarily using resources from the IDES <http://www.azdhs.gov/phs/oids/epi/flu/index.htm> in conjunction with the ADHS State Laboratory <http://www.azdhs.gov/lab/micro/viro.htm>. The IDES maintains the primary influenza surveillance infrastructure, interprets and disseminates surveillance data, and provides recommendations to local health departments. Surveillance for inter-pandemic periods includes laboratory reporting, influenza-like illness (ILI) at sentinel sites, typing/subtyping of specimens at the state laboratory, and other syndrome and non-traditional surveillance data sources, such as sales of over-the-counter pharmaceutical and health supplies. Additional surveillance components will be added during preparations for a pandemic.

4.5 VACCINE AND ANTIVIRAL PROCUREMENT

Production of an influenza vaccine currently requires months, so there may not be an existing supply in the wake of a pandemic. The majority of flu vaccine is currently administered by the private sector. If there is vaccine available, the Immunizations Group <http://www.azdhs.gov/phs/immun/index.htm> in the ADHS PHIMS structure, along with local health departments, may play a major role in pandemic flu vaccine allocation to providers statewide and/or vaccine administration. WHO and/or CDC will provide national prioritization guidelines.

Antivirals may play an important role in handling an outbreak. The Strategic National Stockpile (SNS) <http://www.bt.cdc.gov/stockpile/> contains doses of rimantadine and oseltamivir. ADHS and local health departments may play a role in brokering/administering these pharmaceuticals.

4.6 PREVENTION EDUCATION EFFORTS AND MEDIA OUTREACH

The Communications Group in the ADHS PHIMS structure is responsible for public messaging and community education. The PIO and Health Alert Network (HAN) work together to develop and subsequently release community education information. The “AZ 211” System <http://www.az211.gov/> will provide on-line access to the public health and community education messages.

The local health departments will develop messages and conduct outreach at the local level. There must be consistency in national, state and local public health messages. During a state of emergency, this coordination will occur through the local Joint Information Center (JIC) and through the state Joint Emergency News Center (JENC) at the State Emergency Operations Center.

ADHS has the capacity to activate a live call center and currently maintains a 24-Hour Public Information line. The Department website, Arizona 2-1-1 on-line system, public service announcements, press conferences, and printed materials are all methods that ADHS employs to serve the public with up-to-date information.

4.7 HOSPITAL / HEALTH CARE COORDINATION

The Hospital and Healthcare Support Group in the ADHS PHIMS structure will address allocation/re-allocation issues and surge capacity issues, including staff, beds, ambulances, ventilators and other necessary equipment. This Group, including components from the Bureau of Emergency Medical Services <http://www.azdhs.gov/bems/index.htm> and Bureau of Licensing and Certification <http://www.azdhs.gov/als/index.htm>, will address outstanding needs for first responders, health care providers and long-term care facilities.

Persons to Administer Vaccine:

The local health departments are primarily responsible for ensuring there is an adequate workforce with which to administer influenza vaccine. However, ADHS, through the Immunizations Group, will be available to broker resources and volunteers to manage the immunization need at the local immunization clinics.

Some of the current resources to provide the influenza vaccine include:

- Medical Doctor – ARS § 32-1491 – A doctor of medicine may “dispense” (includes administer) drugs per outlined protocol.

- Osteopathic Physicians and Surgeons – ARS § 32-1852. Osteopathic physicians and surgeons are authorized to exercise all of the same rights and privileges possessed by physicians and surgeons of other complete schools of medicine.
- Registered Nurse (RN) – A.A.C. R4-19-402 – Professional Nurse – (Scope of Practice) Can perform those nursing activities for which the professional nurse has been prepared through basic education (NCLEX-RN).
- Licensed Practical Nurse (LPN) – A.A.C. R4-19-309 – Practical Nurse – (Scope of Practice) Under the supervision of a professional nurse or licensed physician can perform those nursing activities for which the licensed practical nurse has been prepared through basic education (NCLEX-PN)
- Medical Assistant – ARS § 32-1456 – A medical assistant may administer injections under the direct supervision of a doctor of medicine, physician assistant or nurse practitioner.
- Intermediate Emergency Medical Technician or Paramedic – ARS § 36-2205, A.A.C. R9-25-501 may administer immunizations upon successful completion of all the objectives of the ALS Pre-hospital Provider Immunization Training Curriculum and approved by their administrative medical director.
- Pharmacists – A.A.C. R4-23-411 may administer influenza and other limited vaccines to patients 18 years and older upon receipt of a valid prescription order and completion of training.

Other health professionals who have limited or specific authority to administer drugs/vaccines such as school nurses (ARS §36-673), dentists (ARS §32-1202) naturopathic doctors (ARS §32-1581) and students currently studying various medical professions, might be a resource if ADHS is able to work closely with their professional licensing boards (ARS § 36-787(A) (6) – See Authorities, in Appendix D.

Liability:

There are several state references to the liability of volunteers in the event of a state of war emergency or a state of emergency. (for Federal, see Authorities in Appendix D)

Under ARS § 26-310 Use of Professional Skills, during a state of war emergency or state of emergency, any person holding any license, certificate, or other permit issued by any state evidencing the meeting of qualifications of such state for professional skills may render aid involving such skill to meet the emergency as fully as if such license had been issued in this state.

Under ARS § 23-901.06 Volunteer Workers, In addition to persons defined as employees under section 23-901, volunteer workers of a county, city, town, or other political subdivision of the state may be deemed to be employees and entitled to the benefits provided by this chapter upon the passage of a resolution or ordinance by the political subdivision defining the nature and type of volunteer work and workers to be entitled to such benefits. The basis for computing compensation benefits and premium payments shall be four hundred dollars per month.

Under ARS § 26-314, Immunity of state, political subdivisions and officers, agents and emergency workers; limitation rules, The Department, (ADHS) or any other state agency, will not be liable for any claim based upon the exercise or performance, or the failure to exercise or perform, a discretionary function or duty by an emergency worker, engaging in emergency management activities or performing emergency functions. This state and its departments, agencies, boards and commissions and all other political subdivisions that supervise or control emergency workers engaging in emergency activities or emergency functions are responsible for providing for liability coverage, including legal defense, of an emergency worker if necessary. Coverage provided if the emergency worker is acting within the course and scope of assigned duties and is engaged in an authorized activity, except for actions of willful misconduct, gross negligence or bad faith.

4.8 STATE LABORATORY

The Laboratory Group in the ADHS PHIMS structure, primarily composed of sections of the Bureau of Public Health State Laboratory Services (State Laboratory) <http://www.azdhs.gov/lab/index.htm>, supports influenza surveillance by testing influenza specimens submitted by providers throughout the state. The State Laboratory performs preliminary typing, forwards isolates with unusual results to CDC for identification of novel viruses, and provides specimens routinely to CDC for antigenic characterization. The State Laboratory has the capacity for polymerase chain reaction (PCR) testing for identification of influenza A H1, H3, H5, H7, and others as testing information is provided by the CDC.

In preparation for the pandemic, the State Laboratory will be responsible for coordinating the detection of the pandemic strain by receiving and forwarding specimens to the CDC laboratory or performing testing in house, as appropriate. Recommendations for patients to be tested during a pandemic will likely come from the CDC. The purpose of specimen testing does not include testing all patients with suspected influenza.

The State Laboratory supplies influenza collection kits to local health departments. Upon provider request, the local health departments can offer the collection kits and facilitate transport of the specimens to the State Laboratory for testing.

4.9 SPECIAL POPULATIONS, SUCH AS LONG-TERM CARE AND OTHER PARTNER SUPPORT
Special recommendations may need to be promulgated for populations at high risk for influenza complications and for influenza transmission: long term care facility residents, homebound, elderly, orphans, schools, health care providers, other institutions. ADHS will provide guidance and assistance to local health departments regarding these issues, consistent with national recommendations.

4.10 ADHS EXECUTIVE PLANNING COMMITTEE

The Bureau of Emergency Preparedness and Response will ensure that the pandemic influenza plan is maintained, reviewed, and revised on an annual basis. The following individuals will comprise the ADHS Executive Planning Committee. The State Epidemiologist, the EDC Bureau

Chief, the Medical Director EDC, the Office Chief of OIDS, IDES representatives, AIPO representatives, Disease Prevention and Communication representative, State Laboratory representatives, PIO representative and BEPR representatives.

5.0 TIERED RESPONSE LEVELS:

Response activities are based on surveillance and levels of risk. The activities are categorized into the stages listed in the plan below.

5.1 INTER-PANDEMIC OPERATIONS DURING A NORMAL INFLUENZA SEASON

Definition: *Epidemic influenza viruses circulate in human populations causing yearly outbreaks. No evidence that a novel influenza virus has infected humans.*

Surveillance

- Reporting of influenza-like illness (ILI) at sentinel health care facilities:
 - Counties or facilities report to U.S. Influenza Sentinel Provider Surveillance System via Internet, telephone, or fax; ADHS accesses this information online.
 - Additional counties or facilities unable to participate in the national sentinel provider system report directly to ADHS.
 - At least one regularly reporting surveillance site per 250,000 persons population is recommended, or at least one site for smaller counties.
- Weekly reports of statewide influenza activity are submitted to CDC (characterized as “widespread”, “regional”, “local”, “sporadic” or “no activity”).
- Respiratory specimens submitted to the state laboratory are tested and isolates subtyped; a sample of reference isolates are also sent by clinical laboratories for subtyping. IDES receives information through the state laboratory’s electronic laboratory database (LITS) or by communication with the laboratory. The information sharing procedures between IDES, the state laboratory and clinical laboratories will change with the development of the Department’s Medical Electronic Disease Surveillance Intelligence System (MEDSIS), <http://www.azdhs.gov/phs/edc/edrp/es/electronicdiseasesurveillanceprogram.htm> Electronic Laboratory Reporting (ELR), and Laboratory Information Management System (LIMS).
- Testing and subtyping results are submitted weekly to CDC by the State Laboratory, Phoenix Children’s Hospital and U of A Medical Center via Internet or fax.
- Laboratories submit reports of all positive influenza tests to ADHS. Data are monitored and analyzed by ADHS.
- Specimen collection and submission kits are available to sentinel providers through the State Laboratory. Sentinel providers may send selected specimens for testing at no charge for shipping. Additional kits are sent to providers upon specimen receipt.
- Informal calls are made to major hospitals and hospital laboratories throughout the state, as needed, or in conjunction with the local health departments.

- Infection control practitioners, infectious disease doctors, medical examiners or other relevant groups may be requested to provide reports of activity levels or unusual events, as warranted by the influenza season.
- Schools, long-term care facilities, or other institutions report influenza or ILI outbreaks to state or local health departments (passive reporting).
- Weekly influenza activity reports are posted on the Department's website throughout the influenza season. <http://www.azdhs.gov/phs/oids/epi/flu/index.htm>
- National or global influenza activity is monitored through CDC reports or conference calls.
- ADHS works with local health departments to respond to special situations and follow CDC requests (e.g. investigation of pediatric influenza-associated deaths).
- Enhancing influenza surveillance (works in progress):
 - Ensure adequate representation and consistent reporting of ILI from sentinel sites. County health departments are responsible for helping recruit sites; follow-up with non-reporting sites may be done by the county or state health departments.
 - Increase specimen submission from sentinel providers.
 - Recruit regularly-reporting sentinel sites for year-round ILI surveillance.
 - Develop a protocol for investigating institutional outbreaks; work with local health departments to implement the protocol. Investigations will include basic epidemiology of outbreak, vaccine history of cases and staff, and specimen collection.
 - Integrate use of other surveillance sources (e.g. over-the-counter pharmaceutical sales, BioSense) into routine surveillance.

Vaccine and Pharmaceutical Delivery

- Vaccine Delivery
 - Local health departments (LHDs) purchase and administer own vaccines
 - Vaccine manufacturers/distributors ship vaccine directly to the LHD's.
 - The 14 LHD Immunization Programs and 1 CHC (Mariposa Community Health Center) acting as a LHD distributed 39,942 flu and 1,905 pneumococcal vaccines in 2003-04 influenza season.
 - Private sector accounted for 90-95% of adult delivered vaccine.
 - Eligible children receive vaccine through the Vaccines for Children Program (VFC) http://www.azdhs.gov/phs/immun/act_aipo.htm.
 - In 2003-04, 68,221 doses were shipped from the distributor to the approximately 800 VFC providers.
- Pharmaceutical Delivery
 - Under non-pandemic circumstances, ADHS has no role in pharmaceutical delivery.

Emergency Response

- Public Health Incident Management System (PHIMS) is in place but not activated

- during normal day-to-day operations
- Public Health Incident Management System (PHIMS) Description (see Appendix B)

Communications

- PIO – Develops press releases and handles influenza-related media inquiries
- HAN – sends information from the Office of Infectious Disease Services via SIREN or blast fax to key partners and stakeholders

5.2 INTER-PANDEMIC PLANNING

Definition: *Epidemic influenza viruses circulate in human populations causing yearly outbreaks. No evidence that a novel influenza virus has infected humans.*

Surveillance

- Develop sampling scheme for virologic surveillance during pandemic.
- Explore options for increasing specimen collection from sentinel sites, outbreaks, unusual cases, etc.
- Assess laboratory surge capacity and safety issues relating to a pandemic influenza virus.
- Plan for allocation of nationally-limited reagents during pandemic.
- Assess ability to transport specimens to the state laboratory quickly; explore feasibility and need for courier service or other options.
- Educate health care providers on disease-based surveillance and virologic surveillance activities.
- Estimate Arizona morbidity and mortality resulting from potential flu pandemics using Flu-Surge. <http://www.cdc.gov/flu/flusurge.htm>
- Consider analysis of pharmaceutical data; baseline data must be obtained prior to pandemic activity in order to have meaningful surveillance during a pandemic event.
- Develop plan for monitoring hospital emergency department and community health center capacity.
- Identify sites for active surveillance, and guidelines for when to activate active surveillance.
- Explore animal surveillance to supplement surveillance information.
- Explore additional surveillance systems to enhance influenza surveillance (hospital admissions data, hospital discharge data, etc.).
- Investigate methods to obtain timely influenza mortality data from county and/or state vital statistics; establish routine surveillance to identify influenza-associated deaths.
- Establish and maintain contacts with influenza and immunization coordinators in neighboring states.
- Explore linking influenza surveillance to syndromic surveillance.

Vaccine and Pharmaceutical Delivery

- Develop distribution plan for vaccine, antibiotics and antivirals, specifically addressing the possibility of limited supplies and the need for security. The distribution plan may use public, private or a combination of the two methods. Establishments of priority groups will take into consideration CDC guidance, at risk groups in the population, first responders, health care personnel, public works and their families.
- Establish priorities for target groups based on prophylaxis versus therapy.
- Address possibility of adverse reactions, emergence of drug-resistant viral strains and liability issues.
- Conduct inventory of critical equipment, including, but not limited to, statewide availability of antiviral and antibiotic pharmaceuticals, refrigerated depots for vaccines, and transport for delivery of vaccines.
- Develop supply list and establish agreement with commercial companies to obtain those supplies on short notice.
- Develop consultation and training guidelines for the handling and administration of pharmaceuticals for temporary workers.
- Review SNS protocol for requesting supplies of antivirals/antibiotics/vaccine in the event that state supplies become exhausted.

Emergency Response

- Review and update plans regularly by the Bureau of Emergency Preparedness and Response.
- Training of specific PHIMS roles is ongoing.

Communications

- Establish 24-hour information line for use during pandemic (through Arizona Department of Administration, available in English and Spanish, translation services available).
- Update AZ 211 system as new information is available.
- Include development of template messages and press releases for use during a pandemic.
- Assure and update internal review process for key influenza messages (the current method of internal review: messages are drafted by IDES and/or AIPO, reviewed by State Epidemiologist, the Assistant Director of Public Health Services, the PIO, the Operations Chief, the Incident Manager, and the Incident Commander).

Other key planning activities during an interpandemic period:

- Develop and conduct local training exercises (state, county).
- Coordinate pandemic planning with disaster planning.
- Coordinate activities with bordering jurisdictions.
- Evaluate adequacy of existing infrastructure, identify methods to address shortcomings (including but not limited to numbers of hospital beds, ICU beds, ventilators, oxygen, antivirals and antibiotics, medical staff including physicians,

- nurses, PA's, respiratory therapists, radiology techs, nursing, contingency medical care facilities, funeral homes/burial services, social/behavioral health services).
- Support collaboration of local health departments in developing procedures for isolation, quarantine and personal protective equipment (PPE) at international airports.
 - Develop plans to obtain necessary equipment, supplies, human resources, and sites
 - Develop plans to reach certain high-risk groups (e.g. low-income, homeless or undocumented workers) to facilitate access to prophylaxis and treatment.
 - Develop contingency plans for providing food, medical and other essential life support needs for persons confined to their homes.
 - Establish financial/logistical mechanisms for obtaining and distributing necessary medical supplies.
 - Develop prioritization plan for distribution and administration of vaccines, as supplies are likely to be insufficient to meet demand during a pandemic situation.
 - Ensure that each county and tribal health department has a plan in place for surveillance and response during an influenza pandemic. The county/tribal plans should include the same components as the state plan:
 - surveillance of influenza cases;
 - vaccine and antiviral distribution/administration;
 - emergency response; and
 - communication.
 - Create a plan to disseminate influenza surveillance information (to CDC and to partners/stakeholders).
 - Create a plan for continuity of operations in case of increased workload or staff losses during a pandemic.
 - Establish a plan to secure and utilize refrigerated depots for vaccine storage and other influenza-related pharmaceuticals, as well as vehicles for their distribution to selected sites for administration.
 - Establish a state plan for resource reallocation in case of an influenza pandemic.

5.3 NOVEL VIRUS ALERT

Definition: *Identification of a novel influenza virus in a person. Confirmation that the novel influenza virus has infected two or more people, but the ability of the virus to spread rapidly person-to-person and cause multiple outbreaks of disease leading to an epidemic remains questionable.*

ADHS activities will be limited to monitoring reports of the spread of the virus and surveillance to detect any potential cases of pandemic influenza in Arizona. The WHO and CDC will carry out novel virus detection.

Surveillance

Surveillance operations from the inter-pandemic period will continue, and the following will be

implemented:

If outside of influenza surveillance season:

- Notify ILI surveillance partners to be prepared to send reports.
- Obtain reagents for influenza testing from CDC.
- Monitor surveillance reports from CDC and WHO and enact recommendations.
- Ensure that representative and unusual viral isolates are sent to CDC for appropriate testing.
- Obtain any additional testing reagents made available after identification of novel virus.
- Request that providers enhance surveillance for specific epidemiological factors (e.g. travel to affected areas) among persons with influenza or ILI.
- Work with airports or appropriate agencies to develop screening plan for later use.
- Ensure timely and comprehensive reporting of ILI from sentinel sites.
- Ensure timely reporting of influenza from laboratories.
- Subtype influenza A viruses identified in clinical specimens; report any influenza A viruses that cannot be subtyped to CDC immediately and send isolates as appropriate.
- Maintain regular internal communication between State Laboratory and IDHS regarding epidemiological and virologic surveillance.

Vaccine/Pharmaceutical Delivery

- Remain ready for the possibility that novel virus alert which could progress to the pandemic alert stage.

Emergency Response

- Activation of PHIMS may occur.
- Assure testing of communication systems.
- Prepare for potential for isolation and quarantine activity (see Appendix C).

Communications

- Ensure internal communication between PIO and State Laboratory, Epidemiology and Disease Control, and others involved in laboratory surveillance programs and emergency management.
- Monitor information from CDC communication offices to determine national response and recommended messages regarding vaccine supply, antiviral use, low-tech prevention methods, and maintenance of essential services.
- Ensure communication of information to Department Director, general counsel, legislative liaison, tribal liaison, local health liaison, border health liaison, Governor's press secretary, Arizona Division of Emergency Management (ADEM) Public Affairs Director, the Arizona Office of Homeland Security, and other stakeholders as deemed necessary.
- The PIO also will work directly with county health PIOs, if applicable.
- Develop press release, fact sheet, and Q&A templates. Messages will be audience-appropriate and address identified issues and concerns. Messages will include, but not be

limited to, vaccine supply, antiviral use, low-tech prevention methods and maintenance of essential services. Messages will also be developed for each Department division, focusing on the types of issues for which a particular division or office will have lead responsibility (i.e., Community and Family Health; State Laboratory; Behavioral Health)

- Assist website developers in writing and presenting information for posting on Department Website and Arizona 2-1-1 on-line system.
- Determine scope of bilingual assistance needed and secure translator for writing messages and public speaking.
- Prepare to activate State Health Department 24-hour Bilingual Information line.
- Develop messages for each ADHS division, focusing on the types of messages a particular division or office will have lead responsibility (i.e., Community and Family Health, State Laboratory, Behavioral Health, etc.)

5.4 PANDEMIC ALERT

Definition: *Confirmation of person-to-person spread in the general population with at least one outbreak lasting for more than 2 weeks in one country.*

ADHS will monitor reports of disease spread and contact surveillance partners to activate and augment surveillance systems. ADHS will increase laboratory surveillance. AIPO will maintain close contact with CDC and FDA to obtain information plans for vaccine delivery, and work with county/local health departments and representatives of the private medical sector to plan delivery and administration of vaccines when they are available. ADHS will meet with the Arizona Medical Association (ARMA) and the Arizona Pharmacy Alliance to plan for vaccine administration and for antiviral and antimicrobial supplies. AIPO will prepare training material for vaccine administrators. ADHS will ensure communication with County and Local Health Departments, and State and County Emergency Management regarding the progress of the pandemic.

Surveillance

Surveillance operations listed above will continue, and the following will be implemented:

- Request that sentinel providers activate ILI surveillance system, if not already operating.
- Request that surveillance partners (local health departments, sentinel providers, clinical laboratories) increase specimen collection; alert state laboratory to expect an increased number of specimens.
- Screen travelers arriving from influenza-affected areas for ILI.
- Enhance surveillance, including obtaining demographic data on clusters, travelers, or unusual cases.
- Develop contingency plans for obtaining additional laboratory personnel and supplies.
- Obtain CDC guidelines/statements and distribute to partners.
- Increase influenza laboratory testing for persons with compatible clinical syndromes at emergency departments or among hospitalized cases.
- Assess need to change types of laboratory testing performed to adhere to CDC guidance

regarding safety concerns in working with the novel virus.

- Investigate any influenza outbreaks and increases in ILI.
- Consider instituting active surveillance (e.g. school absenteeism; number of patients on ventilators; number of deaths due to respiratory illness; contacting hospitals, emergency departments, clinics, labs that test for influenza; use of SARS self-screening tools).

Vaccine/Pharmaceutical Delivery

- Maintain close contact with CDC and FDA for information on plans for vaccine manufacture. (AIPO)
- Prepare to implement plan for storing and delivering vaccine as it becomes available to ADHS (vs. private distribution), with variations by number of doses. (AIPO, ADEM)
- Review elements of plan for vaccine delivery with partners and stakeholders. (AIPO, LHDs)
- Ensure that human resources, equipment and plans for mass immunization clinics are in place. (AIPO, LHDs)
- Ensure adequate staffing (PHIMS Logistics Section) and Communications (PIO and HAN) for Vaccine Adverse Event Reporting System (VAERS) <http://vaers.hhs.gov/>
- Plan for using VFC distribution system for VFC children. If appropriate, increase award to vaccine distribution company. (AIPO, VFC)
- Obtain latest ADHS recommendations for priority groups for vaccine allocation and modify as necessary based on current surveillance data and vaccine availability projections.
- Meet with Arizona Pharmacy Board <http://www.pharmacy.state.az.us/> and Arizona Medical Association <http://www.azmedassn.org/> to discuss potential need to:
 - increase antiviral and anti-microbial supplies
 - increase role of pharmacists and other approved personnel in vaccine delivery
- Develop, or obtain from CDC, a satellite broadcast script for training/refresher on vaccine administration techniques for persons who do not normally administer vaccines, but will be enlisted to do so in a pandemic. (AIPO)
- Utilize telemedicine to develop teleconferences for health care providers
- Broadcast to LHD and other downlink sites
- Provide video copies of the broadcast for LHD training
- Review SNS protocol, conduct necessary activities as prescribed in protocol.

Emergency Response

- Depending on geographic area affected, the Bureau of Emergency Preparedness and Response will begin to solidify roles assigned in PHIMS
- Notify partners, involve Communications (PIO and HAN), to identify methods to address new shortfalls.

Communications

- Ensure internal communication between PIO and State Laboratory, Office of Infectious Disease Services, Immunization Program and other stakeholders involved in laboratory surveillance programs and emergency management.
- Monitor information from CDC communication office to assess national response.
- The PIO, working with the state health director or designee, depending on volume and nature of the calls, will decide how to work with the media. The Department will identify an English-speaking and Spanish-speaking spokesperson (with at least one backup) for communication with press.
- Activate State Health Department 24-hour Information line with both English and Spanish messages.
- Supply information scripts and appropriate web-links to the Arizona 2-1-1 on-line system.
- Prepare fact sheets detailing responses to questions from the media and the public. Assess need for press release to disseminate information.
- The public information office will notify the Department Director, general counsel, legislative liaison, tribal liaison, local health liaison, border health liaison, Governor's Press Secretary, ADEM Public Affairs Director, county health department PIOs, and other stakeholders when a press release is issued.
- Issue Travel Alert if warranted. Notify Arizona Office of Tourism, Chambers of Commerce and others to ensure widespread notification. Assist communication efforts with travel and tourism organizations to ensure messages on influenza precautions are understood.
- Alert neighborhood watch or other community-based organizations through local health departments and the media.
- If the situation warrants it, call a press conference. The Governor and/or the state health director or designee will lead the press conference and work with public information office to determine who else needs to be involved.
- Hold all press conferences at a central location for ease of parking for the media.
- Provide media access to State Health Laboratory for a preset period of time to avoid prolonged interruption of daily operations.
- The PIO, working with the state health director and governor's office, will decide what level of regular briefing needs to occur.
- If there are few new details, then briefings will occur by press release at 11 a.m. and 4 p.m. whenever possible.
- If needed, ADHS will issue a travel alert; PIO will notify the Arizona Office of Tourism, Chambers of Commerce, and others to insure widespread notification of this information.

5.5 PANDEMIC IMMINENT

Definition: *Confirmation that the novel influenza virus is causing several outbreaks in one country and has spread to other countries, with consistent disease patterns indicating serious morbidity and mortality is likely in at least one segment of the population.*

Surveillance

Surveillance operations listed above will continue, but will be coordinated under the Surveillance Group in the ADHS PHIMS structure (as PHIMS will be activated), and the following will be implemented:

- Maintain epidemiological and laboratory surveillance as described above.
- Analyze data from laboratory reporting, outbreaks, clusters, travelers, hospitals and other healthcare facilities to identify population groups at greatest risk and inform possible prioritization of vaccine or antivirals. Guidance from CDC or WHO may be sufficient for addressing some of these issues.
- Consider special studies to describe unusual clinical syndromes, or vaccine or prophylaxis efficacy.
- Prepare for increased need for laboratory personnel and supplies.
- Disseminate surveillance data to local health departments and providers.

Vaccine/Pharmaceutical Delivery

- Continue activities as listed in pandemic alert stage, including meetings with the Arizona Pharmacy Board <http://www.pharmacy.state.az.us/> and ARMA <http://www.azmedassn.org/>. (PHIMS Immunization Group)
- If vaccine delivery date predicted by CDC, AIPO will work with LHDs to:
 - Provide expected date vaccine is predicted to be available
 - Review distribution plan and update when new information is available
 - Obtain signed agreements with LHDs and private providers on priority order of groups to receive vaccine when supply is limited.
 - Alert to need for security at immunization sites (LHDs, county law enforcement)
 - Alert to need for reporting adverse events to VAERS
- If vaccine is available, fully activate the immunization program. (Immunization Group with LHDs)
- Obtain inventory data on antiviral and anti-microbial supplies. (Immunization and Surveillance Groups)
- Prepare or update recommendations and plans for allocation of antiviral and anti-microbial supplies. (Immunization and Surveillance Groups)
- Review SNS protocol, conduct necessary activities as prescribed in protocol.

Emergency Response

- Activate PHIMS, open Health Emergency Operations Center (HEOC) to accommodate personnel to manage incident
- Review and enhance Behavioral Health Services plans
- Review and enhance capacity for disposition of dead bodies

Communications (PHIMS Communications Group)

- Notify the Incident Commander, general counsel, legislative liaison, tribal liaison, local health liaison, border health liaison, Governor's Press Secretary, ADEM Public Affairs

Director, county health department PIOs, and other stakeholders of Pandemic Imminent Stage.

- Continue information flow to local health departments and other stakeholders via updated website pages, Arizona 2-1-1 on-line, ADHS 24-hour Information line, Department Call Center, press releases, fact sheets, and other correspondence.
- Update documents, fact sheets, Website and Information line with current surveillance information. Ensure all information is translated into Spanish in timely manner.
- Provide press briefings and issue press releases as outlined in Pandemic Alert Stage. Communications Group will work with epidemiology and state laboratory staff to develop talking points for primary spokespersons.
- Communications Group will work with ITS Resources and Procurement Groups in the Logistics and Finance Sections, respectively, to identify and prepare necessary logistical support on media relations and other communication activities, including: computers, phones, fax machines, Internet and modem connections, and other necessary hardware/software. ADHS will continue use of HAN for distribution of information via SIREN and/or blast faxing.
- Assist Department with Emergency Management, Arizona Office of Homeland Security, local health departments and others with specific communication objectives.
- Establish and implement Behavioral Health communication plan. Provide resources for those seeking assistance.
- Establish and implement communication plan for the Vital Records for those seeking assistance with death certificates.
- Communications Group will develop and implement health education campaign for influenza including the following: signs/symptoms of influenza, importance of hand-washing, avoiding infection, quarantine, checking on family members living alone, vaccination clinic locations, vaccine safety and storage using the ADHS 24-hour Information line number, Department website and possible the internal ADHS Call Center.

5.6 PANDEMIC

Definition: *Outbreaks and epidemics are occurring in multiple countries and spreading across the world.*

Surveillance efforts will be overwhelmed. Emphasis will shift from detecting cases caused by the influenza virus to monitoring demographic characteristics that may indicate a need to revise priority groups for receiving vaccine and antiviral medications if available supplies are limited. Vaccine delivery will be at its highest level, and the system to detect possible adverse reactions to the vaccine will be closely monitored. Alternative treatment sites will probably need to be established as hospitals are likely to be overwhelmed.

Surveillance (Surveillance Group)

- Surveillance systems will likely be overwhelmed. Surveillance activities described above will continue to the extent possible while diverting personnel to the highest-priority activities.
- Continue to monitor data received, and use data to establish or reassess vaccine priority groups.
- Analyze morbidity and mortality data to establish age- and geographic area-specific rates.
- Continue to monitor CDC and WHO reports for guidance and surveillance information.
- Focus laboratory surveillance on detecting antigenic drift variants or re-assortment viruses.
- Divert any quarantine personnel to higher-priority activities.

Vaccine/Pharmaceutical Delivery (Immunizations Group)

Continue all pandemic imminent activities. Vaccine may or may not be available for a sizable proportion of the State's population.

- Monitor VAERS data for evidence of adverse reactions to the influenza vaccine. Report findings routinely to the PHIMS Planning Section and to the CDC.
- Modify recommendations and agreements on priority groups for receiving the vaccine to reflect greater availability of vaccine.
- Purchase vaccines and/or antiviral agents as they become available if not provided by the federal government.
- Review surveillance data for changes in risk factors that could require modification of recommendations for priority groups for receiving vaccine. (along with Surveillance Group)
- Monitor availability of antivirals and, when appropriate, recommend changes in priority groups for receiving vaccine or antivirals. (along with Arizona Pharmacy Board and ARMA)
- Handle antiviral medication prescriptions.
- Distribute vaccine and/or antiviral agents as they become available; use Vaccine Management System (VACMAN) for inventory tracking.
- Assess antiviral/antibiotic/vaccine needs, conduct necessary activities as prescribed in SNS protocol.

Emergency Response

- Distribute masks to public health first responders (ex. N-95).
- Request government to issue waiver for National Guard/Military to perform Law Enforcement duties.
- Request health care workers from other institutions.
- Respond to Governor's possible declaration of state of emergency, subsequent activation by ADEM of State Emergency Operations Center (SEOC).
- PHIMS is in full operation.
- HEOC to be in contact with SEOC.

Communications (PHIMS Communications Group)

- Notify the Department Director, general counsel, legislative liaison, tribal liaison, local health liaison, border health liaison, Governor's Press Secretary, ADEM Public Affairs Director, Arizona Office of Homeland Security, county health department PIOs, and other stakeholders of Pandemic Stage.
- Continue information flow to local health departments and other stakeholders.
- Update documents, fact sheets, Web site, Arizona 2-1-1 on-line, Department Information line and Department Call Center scripts with current surveillance information. Ensure all information is translated into Spanish in timely manner.
- Provide press briefings and issue press releases as outlined in Pandemic Alert Stage.
- Continue health education campaign to keep ill persons at home, providing translations into Spanish.
- Disseminate written daily briefings to media of state and local efforts.

5.7 SECOND WAVE

Definition: *Confirmation of a second or later wave caused by the same novel virus strain.*

In a typical pandemic, new cases of influenza peak and then decline but are followed by an increase in incidence a few months later. All agencies and health care providers must make use of the interim period to prepare for a resurgence of diseases, including addressing shortfalls in supplies and personnel.

Surveillance (PHIMS Surveillance Group)

It is important to maintain surveillance even after the initial decline in new cases. This should include at least the following functions:

- Reporting of influenza-like illness (ILI) at sentinel health care facilities.
- Laboratory reporting of influenza.
- Testing of respiratory specimens submitted to the state laboratory for influenza testing and strain subtyping of isolates.
- Informal calls made to major hospitals and hospital laboratories throughout the state.
- Submission of weekly report of statewide influenza activity to CDC.
- Reporting of subtyping and testing results to CDC weekly by the state laboratory and other facilities equipped for subtyping.
- Reporting of unusual events or changes in activity levels by infection control practitioners, infectious disease doctors, medical examiners or other groups.
- Passive reporting of influenza or ILI outbreaks by schools, long-term care facilities, or other institutions.

Vaccine and Pharmaceutical Delivery (PHIMS Immunizations Group)

- Continue immunization efforts in lower risk groups as vaccine becomes available.

- Conduct necessary activities as prescribed in SNS protocol.

Emergency Response

- PHIMS may continue or reconvene depending upon severity of the secondary outbreak

Communications

- Communication actions and methods will continue as described above and information disseminated will depend upon emerging second wave

5.8 PANDEMIC OVER

Definition: *Confirmation that the pandemic has ended.*

Surveillance

- Surveillance will return to inter-pandemic activities to the extent possible.

Vaccine and Pharmaceutical Delivery

- Activities will return to inter-pandemic activities to the extent possible.

Emergency Response

- Once influenza pandemic has been declared over, staff will participate in after-action reviews as necessary
- Incident Manager to conduct the after-action review and producing the report, so that lessons learned and potential weaknesses in response may be identified
- Step-down from Plan – This plan remains in effect until the ADHS Director (Incident Commander) determines it is time to step down (i.e., de-activate PHIMS).

Communications

- Communicate to the media and public that the pandemic is over

6.0 ORGANIZATIONAL ROLES AND RESPONSIBILITIES

6.1 STATE GOVERNMENT

Governor's Office

- May declare a State of Emergency
- May consider issuing an Enhanced Surveillance Advisory
- May order the Strategic National Stockpile if needed

Arizona Department of Health Services

PHIMS Command Staff and Section Chiefs

- Meet weekly or as needed to discuss situation
- Oversee Department Services and resources to address response
- Determine policy recommendations and forward to the Director (Incident Commander)

Infectious Disease Epidemiology Section (IDES)/or Surveillance Group (depending on PHIMS activation)

- Submit weekly reports of statewide influenza activity to the CDC
- Monitor national or global influenza activity through CDC reports or conference calls
- Enact enhanced surveillance and laboratory recommendations from CDC or WHO
- Monitor surveillance data for the state
- Ensure timely and comprehensive reporting from laboratories, sentinel sites, and other reporting sources
- Activate enhanced surveillance sources according to the pandemic phase/level
- Coordinate with local health departments and the State Laboratory to increase surveillance as appropriate
- Collaborate with local health departments and the State Laboratory to ensure appropriate specimen collection and handling
- Analyze surveillance data to inform other activities
- Disseminate influenza information to clinicians, local health departments, and other stakeholders; ensure posting of regular influenza activity reports on the health department's website throughout the influenza season
- Provide isolation and quarantine information to stakeholders and the governor

Arizona Immunization Program Office (AIPO) or the Immunizations Group (depending on PHIMS activation)

- Maintain close contact with CDC and FDA for information on plans for vaccine manufacturing.
- Implement plan for storing and delivering vaccine as it becomes available to ADHS
- Review elements of plan for vaccine delivery with partners and stakeholders
- Meet with stakeholders to discuss potential need to increase antiviral and anti-microbial supplies and increase role of pharmacists in vaccine delivery
- Obtain signed agreements with LHDs and private providers on priority order of groups to receive vaccine when supply is limited
- Monitor VAERS data
- Assist counties in planning mass vaccination activities

Public Information Office (PIO) or the Communications Group (depending on PHIMS activation)

- Create press releases for the media
- Assist State Epidemiologist in preparation to work with the media
- Conduct press conferences as appropriate

Bureau of Emergency Preparedness and Response (BEPR)

- Utilize the Health Alert Network (HAN) to communicate with county health officials, hospitals, physicians, laboratory directors, community health centers, childcare centers, schools and the media
- Provide influenza training to medical providers
- Develop public education programs and materials
- Review update and maintain this plan

Bureau of Public Health State Laboratory Services (State Laboratory) or the Laboratory Group (depending on PHIMS activation)

- Provide training for commercial labs on specimen submission and laboratory viral culture
- Process submitted respiratory specimens and subtype isolates
- Submit testing and subtyping results weekly to CDC via internet or fax
- Ensure that representative and unusual viral isolates are sent to CDC for appropriate testing

Arizona Division of Emergency Management (ADEM)

- Operate the State Emergency Operations Center (SEOC)
- In the event of a state-wide emergency, procure needed logistical resources

State Board of Funeral Directors and Embalmers

- Oversee and assist in the management of increased deaths and burial activities

State Board of Pharmacy

- Provide guidance regarding proper certification and utilization of pharmacists in an emergency response (ex. mass vaccination clinics)

Arizona Department of Economic Security

- CPS program-assist with the placement of orphans in foster care

6.2 LOCAL GOVERNMENT

County Emergency Management

- Operate the County Emergency Operations Center (CEOC)
- Maintain contact with the State Emergency Operations Center (SEOC)

County Health Departments

- Recruit sentinel sites and other reporting sources as appropriate to the pandemic phase/level
- Ensure timely and consistent reporting from sentinel sites and other reporting sources
- Provide county surveillance information to state surveillance personnel; maintain regular communications with state surveillance personnel
- Conduct additional primary surveillance as needed
- Set-up and administer mass vaccination sites

- Implement Isolation and Quarantine as needed

Metropolitan Medical Response System (MMRS)

- Administer vaccine to first responder and law enforcement communities
- Assist in providing PPE to first responder and law enforcement personnel

6.3 FEDERAL GOVERNMENT

Centers for Disease Control and Prevention

- Provide on-going surveillance updates and guidance
- Provide criteria for influenza vaccine and antiviral use
- Provide local assistance as requested
- Consult with vaccine and antiviral manufacturers on availability
- Investigate alternative resources (manufacturers) of vaccine and antivirals

Food and Drug Administration

- Oversee the safety and viability of vaccines and pharmaceuticals

Private Organizations/Volunteer Organizations

- Supply resources and volunteers for mass dispensing sites

7.0 APPENDICES

- A. World Health Organization (WHO) Pandemic Phases 1999
- B. PHIMS Description & Organizational Chart
- C. Isolation and Quarantine Information
- D. Legal Authorities
- E. Algorithm

8.0 LIST OF WEBSITE REFERENCES

- A. Planning Guidance for Health Care System (DHHS/NVPO)
<http://www.hhs.gov/nvpo/pandemicplan/annex2.pdf>
- B. Vaccine Development and Production (DHHS/NVPO)
<http://www.hhs.gov/nvpo/pandemicplan/annex5.pdf>
- C. Vaccination Strategies, Monitoring, and Safety (DHHS/NVPO)
<http://www.hhs.gov/nvpo/pandemicplan/annex6.pdf>
- D. Antiviral Strategies and Use (DHHS/NVPO)
<http://www.hhs.gov/nvpo/pandemicplan/annex7.antiviral.pdf>
- E. Strategies to Limit Transmission (DHHS/NVPO)
<http://www.hhs.gov/nvpo/pandemicplan/annex8.stratlimittrans.pdf>

APPENDIX A
WHO Pandemic Phases - 1999

Phase	Level	Definition
0 Inter-pandemic Phase	0	Epidemic influenza viruses circulate in human populations causing yearly outbreaks No evidence that a novel influenza virus has infected humans
	1	<u>Novel Virus Alert</u> – Identification of a novel influenza virus in a person
	2	Confirmation that the novel influenza virus has infected two or more people, but the ability of the virus to spread rapidly person-to-person and cause multiple outbreaks of disease leading to epidemic remains questionable.
	3	<u>Pandemic Alert</u> – Confirmation of person-to-person spread in the general population with at least one outbreak lasting for more than 2 weeks in one country.
1		<u>Pandemic Imminent</u> - Confirmation that the novel influenza virus is causing several outbreaks in one country and has spread to other countries, with consistent disease patterns indicating serious morbidity and mortality is likely in at least one segment of the population
2		<u>Pandemic</u> - Outbreaks and epidemics are occurring in multiple countries and spreading across the world.
3		<u>End of the first wave of the pandemic</u>
4		<u>Second Wave</u> - Confirmation of a second or later wave caused by the same novel virus strain.
5		<u>Pandemic Over</u> - Confirmation that the pandemic has ended

APPENDIX B

PHIMS Organization

The **Public Health Incident Management System (PHIMS)** is the Department's Incident Management System. It is an organizational framework within which the Department responds to an emergency that is consistent with the National Incident Management System (NIMS). During an emergency, Department resources such as personnel and supplies as well as activities, may need to be mobilized across programs. The PHIMS response utilizes a structure that fosters communications between the tactical (front line responders) and through a chain-of-command. This structure is NIMS compliant.

PHIMS Staff

(See the Pandemic Influenza PHIMS Response Organizational Chart located after this introduction as a visual example)

The **Incident Commander** consists of the Department Director or their designee who oversees the response. A **Public Policy Advisory Group** may be assembled as needed and is comprised of selected Department Response Sector Leaders (Division Directors, Bureau and Office Chiefs) to assist the Incident Commander in developing public policy recommendations. The Incident Commander then assigns an **Incident Manager** who is responsible for managing the Department's response activities by coordinating the Operations, Planning, Logistics and Finance/Administration sections. In addition, this individual develops the Public Health Incident Action Plan (IAP) in conjunction with the Planning Section

The Incident Manager is supported by a command staff that is represented by the State Epidemiologist, Information Officer, Liaison Officer, Safety Officer and a Chief for each of the Operations, Planning, Logistics and Finance/Administration sections.

The **PHIMS Command Staff** is comprised of an **Information Officer**, **Liaison Officer** and a **Safety Officer**. The Information Officer develops material, has it reviewed internally and releases it to the media. The Liaison Officer maintains relations between the Department and outside agencies and the Safety Officer oversees the safety of the response.

The **PHIMS General Staff** includes Operations, Planning, Logistics, and Finance/Administrative responsibilities. These responsibilities remain with the Incident Manager (IM) until they are assigned to other individuals. When the Operations, Planning, Logistics or Finance/Administrative responsibilities are established as separate functions under the IM, they are managed by a section chief and can be supported by other functional units (Group Supervisors and Unit Leads)

- The **Operations** Staff is responsible for carrying out the response activities described in the Incident Action Plan (IAP). The Operations Section Chief coordinates Operation Section activities and has primary responsibility for receiving and implementing the IAP. The Operations Section Chief reports to the Incident Manager and determines the required resources and organizational structure within the Operations Section. Here are some examples of activities that the Operations Section might be involved in:

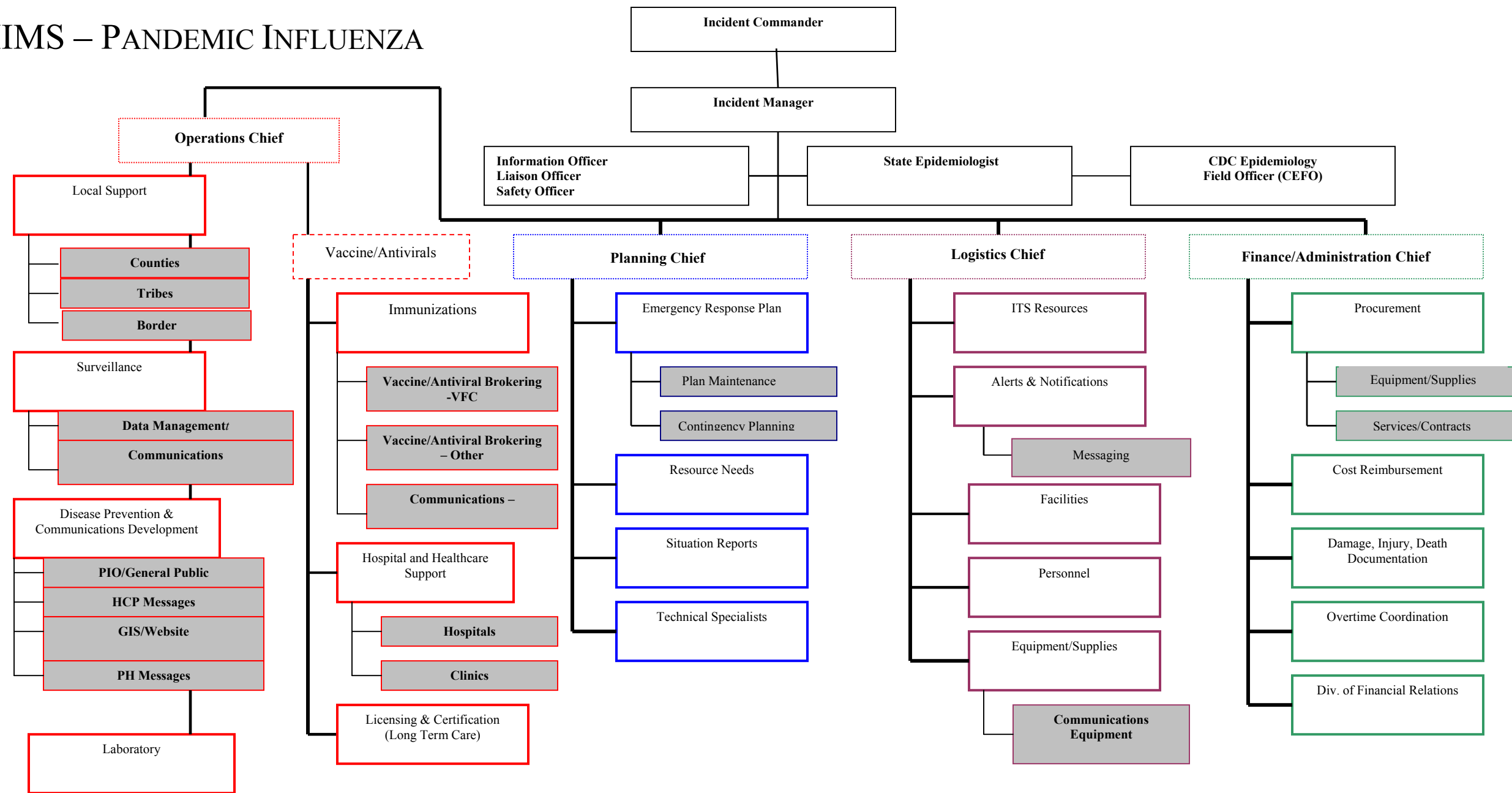
- Conduct human case surveillance and characterize an outbreak
- Conduct human case follow-up
- Disseminate data (cases, geographical distribution)
- Handle public, media and healthcare provider inquiries
- Develop messages covering clinical information and prevention
- Oversee funding to counties for activities
- Make regular updates to local health departments
- Identify need and broker vaccine/antivirals
- Provide Behavioral Health Services to ADHS staff
- Determine needs of Arizona hospitals
- The **Planning** Staff is responsible for the collection, evaluation, dissemination and use of information about the development of the incident and status of resources. This section's responsibilities also include creation of the Incident Action Plan (IAP) which defines the response activities and resource utilizations for a specified time period.
 - Development of IAP
 - Compilation of PHIMS Updates/Briefs into the weekly/daily Situation Report
- The **Logistics** Staff is responsible for providing additional facilities, services, and materials for the incident response.
 - Additional equipment for HEOC, Communications, Call Center, etc.
 - Facilities
 - Personnel (above and beyond routine need)
- The **Finance and Administration** Staff is responsible for all financial, administrative, and cost analysis aspects of the incident.
 - Procurement of items/services

- Maintenance of contracts

The modular organization of PHIMS allows responders to scale their efforts and apply the parts of the PHIMS structure that best meet the demands of the incident. In other words, there are no hard and fast rules for when or how to expand the PHIMS organization. Many incidents will never require the activation of Planning, Logistics, or Finance/Administration Sections, while others, such as Pandemic Influenza, will require some or all of them to be established.

Communications occurs across groups, but also comes directly to one's supervisor and subsequently to the Section Chiefs and Command Staff. The Section Chiefs and Command Staff meet as needed to use information to make decisions. Information from these meetings and regular updates are incorporated into Situation Reports that are disseminated by e-mail to the entire response network to keep everyone up to date and anticipate future issues.

PHIMS – PANDEMIC INFLUENZA



APPENDIX C

Isolation and Quarantine

Isolation and Quarantine

Isolation refers to the separation of an individual or individuals, infected with influenza from non-infected individuals. Quarantine refers to the separation of an individual, or individuals, exposed to influenza from non-infected and non-exposed individuals.

There are three sources of authority and direction for Isolation and Quarantine:

1. ARS § 36-624

Gives the counties the authority to conduct isolation and quarantine measures. Must be consistent with the due process requirements that are specified under ARS 36-788 and 36-789 (see below). Some counties may have established their own procedures for isolation and quarantine under this authority, however many counties may not be prepared in this area.

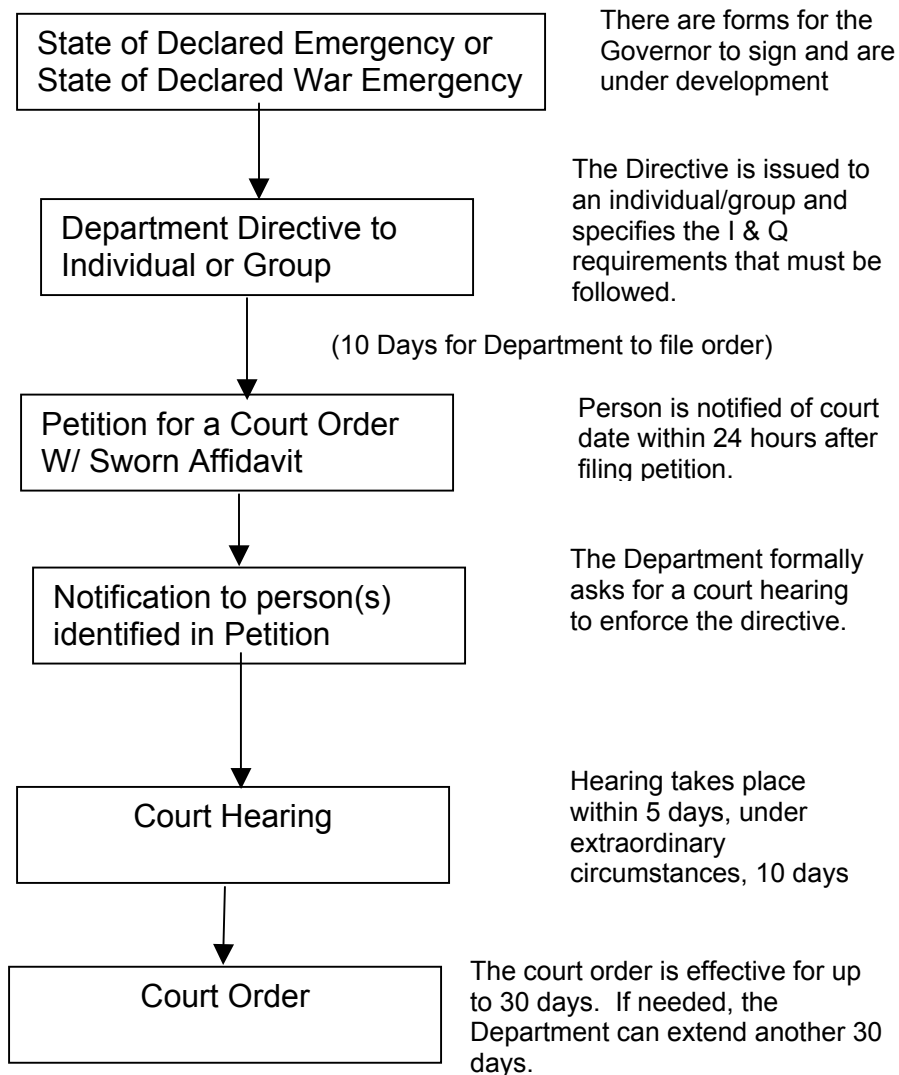
2. ARS § 36-787 through 36-789

Gives the isolation and quarantine authority to the State during a state of emergency or state of war emergency.

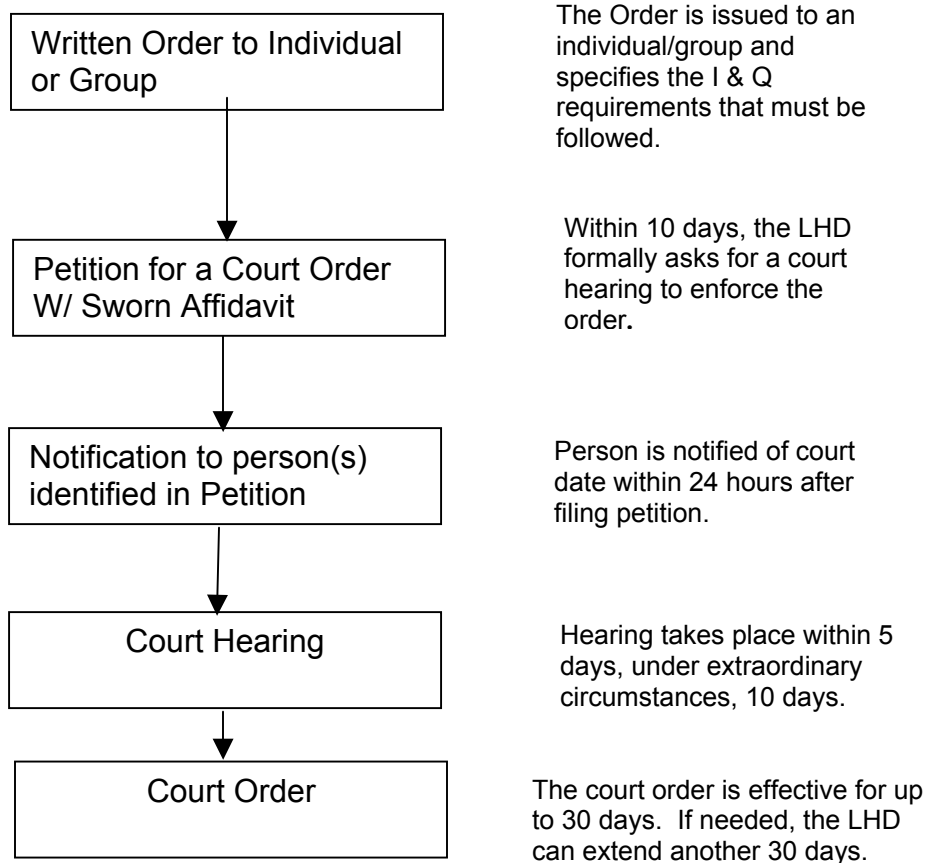
3. AAC R9-6-388

These rules give the local health agency a process from which to issue isolation and/or quarantine orders that are congruent with ARS 36-624, ARS 36-788 and ARS 36-789 (see flowcharts below).

During a Governor-declared state of war or state of emergency, the Department (ADHS) must follow the process below to issue an order for isolation or quarantine:



The local health agency must follow the process below to issue an order for isolation or quarantine:



Division of Public Health Services

Office of the Assistant Director

Public Health Preparedness Services

150 N. 18th Avenue, Suite 140
Phoenix, Arizona 85007
(602) 364-4564
(602) 364-3199 Fax

JANET NAPOLITANO, GOVERNOR

SUSAN GERARD, DIRECTOR

SAMPLE QUARANTINE ORDER

Under Arizona Revised Statutes, (ARS) §36-787, the Governor, by declaring a state of emergency, has given the authority to the Arizona Department of Health Services to issue this QUARANTINE ORDER.

This QUARANTINE ORDER in accordance with ARS §36-789 (A) (1), hereby states that _____ residing at the location of _____
(name or names of individuals) (state location)
is subject to quarantine beginning on _____ at _____ a.m./p.m. As a quarantine measure, the recipient(s) of this QUARANTINE ORDER must remain at _____ until _____ at a.m./p.m. This infectious disease control measure is needed to prevent the spread of _____.
name of infectious disease

You may petition the Arizona Superior Court for review of the restriction of your freedom of movement contained in this QUARANTINE ORDER pursuant to ARS §36-789 (J).

Signature of Director, Arizona Department of Health Services

Issued by: _____
Name, Title, Date

I have received an original copy of this order: _____
Patient Signature Date

APPENDIX D

Legal Authorities

STATUTORY AUTHORITY		
I. STATUTE	AGENCY	AUTHORITY
U.S. Public Law 93-288	Federal Government	<ul style="list-style-type: none"> Provides authority to respond to emergencies and provide assistance to protect public health; implemented by Federal Emergency Management Act
USC Title 42-264	Federal Government	<ul style="list-style-type: none"> Provides the U.S. Surgeon General the authority to apprehend and examine any individual(s) reasonably believed to be infected with a communicable disease for purposes of preventing the introduction, transmission, or spread of such communicable disease only: <ol style="list-style-type: none"> if the person(s) is moving or about to move from state to state. if the person, upon examination, is found to be infected, he may be detained for such time and in such manner as may be reasonably necessary.
USC Title 42-139 Sec. 14503	Federal Government	<ul style="list-style-type: none"> Liability protection for volunteers – No volunteer of a non-profit organization or governmental entity shall be liable for harm caused by an act of omission of the volunteer on behalf of the organization or entity.
ARS § 36-782	Governor	<ul style="list-style-type: none"> In consultation with the Director of ADHS, may issue an enhanced surveillance advisory.
ARS § 35-192	Governor	<ul style="list-style-type: none"> Allows Governor to declare a state of emergency.
ARS § 26-303	Governor	<ul style="list-style-type: none"> Gives Governor authority over state agencies and the right to exercise police power. Allows Governor to delegate authority to adjutant general.
ARS § 26-310	Division of Emergency Management	<ul style="list-style-type: none"> Allows any person holding any license, certificate, or other permit issued by any other state to render aid to meet the emergency as fully as if such license had been issued in this state.
ARS § 26-311	Division of Emergency Management	<ul style="list-style-type: none"> Protects state employees, volunteers, and employees from other states against liability claims while performing duty's during a state of emergency.

ARS § 36-136	Arizona Department of Health Services	<ul style="list-style-type: none"> Allows Director to institute isolation or quarantine.
ARS § 36-787(A)(6)	Arizona Department of Health Services	<ul style="list-style-type: none"> Establishes in conjunction with applicable licensing boards a process for temporary waiver of the professional licensure requirements to address the state of emergency or state of war emergency.
ARS § 787(A) (7)	Arizona Department of Health Services	<ul style="list-style-type: none"> Grants temporary waivers of health care institution licensure requirements to address the state of emergency or state of war emergency.
ARS § 36-624	County Health Departments	<ul style="list-style-type: none"> Allows county health departments to adopt quarantine and sanitary measures to prevent the spread of the disease.
ARS § 36-627	County Health Departments	<ul style="list-style-type: none"> Allows county health departments to assume control of hospitals and other places where infectious or contagious disease exists. Allows county health department to provide temporary hospitals or places of reception for persons with infectious or contagious diseases.
ARS § 36-628	County Health Departments	<ul style="list-style-type: none"> Allows county health departments to employ physicians and others they deem necessary to provide care for persons afflicted with contagious or infectious diseases.
ARS § 26-311	Local Governments	<ul style="list-style-type: none"> Allows mayors or chairmen of the board of supervisors to declare a local emergency
AAC R9-6-204	Arizona Department of Health Services	<ul style="list-style-type: none"> Allows for collection of patient specific information for positive laboratory reports of influenza

APPENDIX E Algorithm

